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**BUREAU OF EDUCATION**

**INDIA**

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**PAMPHLET**

**No. 2**

**The Education of Factory  
Children in India**



**CALCUTTA**  
**SUPERINTENDENT GOVERNMENT PRINTING, INDIA**

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## PREFACE

THE education of Indian children employed in factories or on tea gardens is one which has engaged some attention in recent years. The Indian Factory Labour Commission (1908) considered that every facility and encouragement should be given to promote the education of children working in factories. They recommended the opening of special schools close to the factories. The scope of the Commission did not include tea gardens; but the condition of education on tea estates in Eastern Bengal and Assam had already (in 1906) been carefully examined by Captain W. M. Kennedy, and measures for improvement had been taken.

The Government of India have frequently made enquiries about the progress of a development to which they attach great importance.

The difficulties in the way of the education of factory children in India are indifference, the opposition of parents who do not wish their children to feel themselves above manual toil, and in some cases the objection of managers to anything which may tend to remove labour. There is also one general cause which militates against the introduction of special measures for this class of children. This is the fact that elementary education is not compulsory in India. The application of compulsion to any particular class would accordingly be difficult and might be interpreted as inequitable. It is also to be observed that the Factory Labour Commission found no reason why the obligation to provide elementary instruction for the children employed by them should be placed upon employers of factory labour only, nor any analogous provision in India which could be cited in support of such a proposal. The result is that a large number of the children employed in various kinds of works go uneducated. Nevertheless a calculation made for certain provinces in 1913 showed that 17 per cent. of the children employed were actually at school. On the ordinary reckoning of the percentage of the population which may be expected to be at school this compared not unfavourably with the condition of things with regard to children in general throughout India.

While the difficulties which have been cited in this matter still prevail, there is no doubt that certain owners of factories and of gardens have set an excellent example in providing for the education not only of the children actually employed but of the children of their employees. In order to show how difficulties have been overcome it has been thought desirable to collect descriptions of certain schools. The selection made is by no means intended to indicate that other institutions do not exist which are equally worthy of notice. It has been sought to give merely typical instances.

The description of the Buckingham and Carnatic Mills School, Madras, has been written by Sir Clement Simpson and Miss Pearce in consultation with the officers of the Education Department. Then follow descriptions of systems of tea-garden schools written by Dr. Graham and Mr. W. L. Travers. The third part of the pamphlet is occupied by a description of the schools maintained by the East Indian Railway at its collieries near Giridih. The system in this case is peculiar in that elementary education is compulsory for all boys on the Company's estates. The description has been written by Mr. G. E. Fawcus, Inspector of Schools of the Chota Nagpur Division in Bihar and Orissa, in consultation with the Colliery Superintendent and the local Inspecting Officer for Muhammadan education.

H. SHARP.

DUBLIN ;  
*March 1918.*

# THE EDUCATION OF FACTORY CHILDREN IN INDIA.

## 1. THE BUCKINGHAM AND CARNATIC MILLS SCHOOL, MADRAS.

The Buckingham Mill Company Limited was registered on 17th August 1876 and the Carnatic Mill Company Limited on 30th June 1881. The mills are located at Perambore near the western or north-western outskirts of the city of Madras, and cover between them, inclusive of the grounds in which the dwelling houses of some of the employees are located, the school grounds and Institute grounds, an area of over one hundred acres. They employ over ten thousand workpeople. Their fundamental business is the spinning of cotton yarn and the manufacture of cloth, but besides the ordinary processes of spinning and manufacturing the Companies dye, bleach and finish cotton yarn and cloth, and pack their own goods for export.

In the early days of the Companies the workshop facilities in Madras for repairs to machinery of all descriptions were so limited that the mills were compelled to start their own mechanical and carpenter's workshops. These workshops have developed, *pari passu*, with the development of the mills, so that at the present day the mills carry out by their own staff and under their own immediate supervision nearly all their own building and construction work in addition to repairs.

It is probably unnecessary to state that, like all business of any magnitude, the work is departmentalized and co-ordinated. Small sections of departments have also become necessary. For instance, in the packing department of the warehouse, book binding, paper ruling, paper printing and pattern making are carried on. The war has furthermore introduced new branches of employment among which may be mentioned armature winding and copper electroplating, the latter being rendered necessary by the difficulty experienced in obtaining from Europe materials made out of copper. The mills thus provide work in other branches of employment than in cotton spinning, weaving and packing, and afford

opportunities for the training of men in any one or more of several of the fundamental industries of modern times.

It is thus evident that if once a boy obtains a footing, ordinarily as a half-timer, in the mills, he has, given energy and ambition, plenty of scope for the selection of a definite well-paid trade or calling within the mill compound. Conversely, the mills, owing to the scope of the work they have to perform, have an interest in attracting, producing and in retaining intelligent workmen; and this is what they seek to do in the class rooms of the school and in the Institute that they provide for their boys and workpeople.

The school.

The Joint School, originally the Buckingham Mill School, was started with less than a dozen boys, half-timers, in the compound of the Buckingham Mill. It has grown apace and now includes half-timers, children of workpeople, full-timers, and grown-ups who attend the evening technical classes. It should perhaps be here explained that half-timers are for the most part employed in the spinning room where piecing is done, and in due course they become full-time spinning room piecers. Piecing is difficult for a youth after he attains a certain height so that it is not a man's work. The main work of the spinning room is thus done by young people.

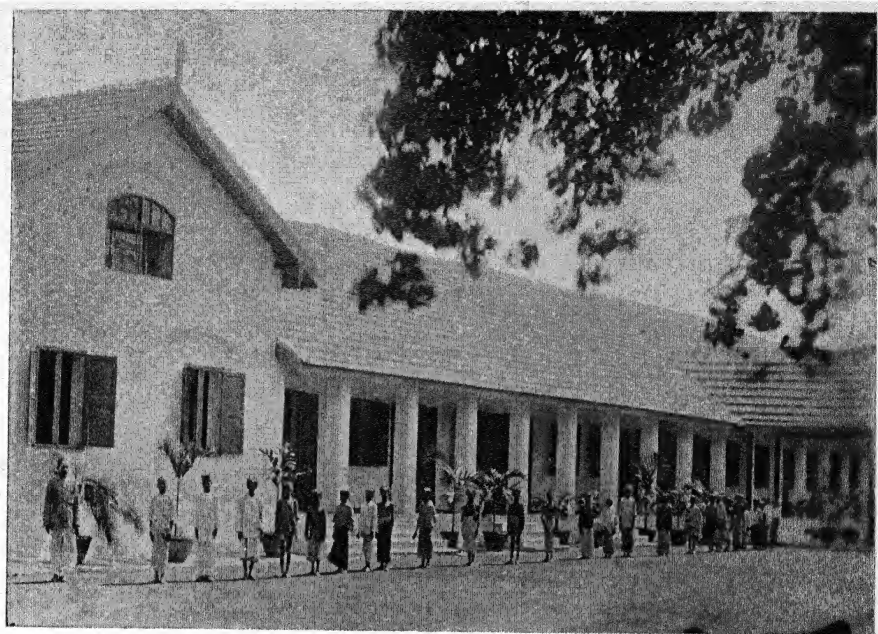
The first reference to a school is in the Buckingham Mill Company's Directors' report to the shareholders for the half-year ending 31st December 1901 and runs as follows:—

“Your Directors also propose to start experimentally, if possible with Government aid, a small school for half-timers, so that operatives may acquire a little knowledge of English, reading, writing and arithmetic and in time become independent of interpreters. This should prevent their being led away by agitations and lead to the more intelligent working of machinery.”

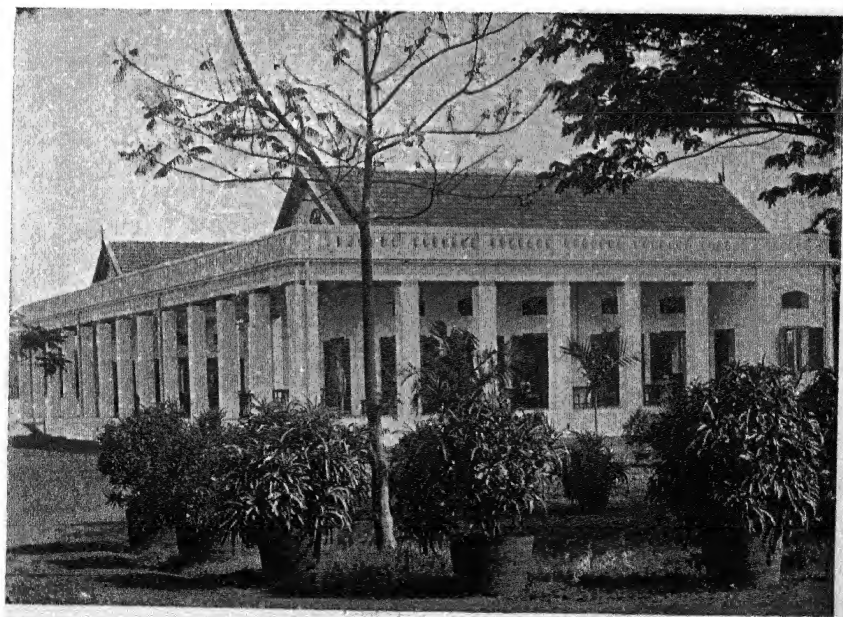
However, nothing appears to have been done until some years later.

Language difficulty.

The European officers of the mills could not speak the language of the workpeople and the latter did not know English. Communication between the Europeans and the workpeople took place



1. Buckingham and Carnatic Mills School, Madras.



2. Buckingham and Carnatic Mills, Madras. Library and Reading Room.



through intermediaries who acted as interpreters. These were men of low educational attainment, but men who well knew that neither side could detect misinterpretations, and who were careless and indifferent to the effects of misinterpreted instructions. Interpreters were thus the channel of all orders to the workpeople, and the channel of applications from workpeople to the officers for increases of pay, leave in case of sickness, family bereavement or other cause. Labour troubles and constant misunderstandings between the management and the workpeople arose. To what extent interpreters were to blame is not now material, but the result was that the management set about reducing the necessity for the use of an intermediary for the ordinary purposes of daily intercourse.

The first step taken was to offer the European officers inducements to learn Tamil, the second to see whether anything could be done to teach the workpeople sufficient English to understand orders connected with their work and to enable them to calculate and to check for themselves the amount of their wages. For this purpose it was considered that a knowledge of the three Rs was sufficient.

The school, started in the Buckingham Mill compound in 1904, developed slowly at first until 1907-08, when it attracted the attention of the Indian Factory Commission. This Commission while approving of the school disapproved of the site and of the holding of the classes within the same compound as that in which the mill itself was located. The Management was then faced with the decision either to close down the school or find another habitation. The closing of the school and the stoppage of the work that was being done, just at its commencement, and before a thorough trial of the experiment had been made, was not to be considered. The result was that the Buckingham Mill School was moved to a vacant bungalow belonging to the Mills in an adjacent compound, close to which was another bungalow which was about the same time occupied by the Carnatic Mill for the same purpose.

This step having been taken the next difficulty was supervision. So long as the school was in the mill compound the mill Manager exercised general supervision over it, but when it was moved to a compound outside the walls of the mill some other

means of supervision became necessary. At this juncture Mrs. Hogg, formerly of the Free Church of Scotland Mission, came forward and very kindly offered her services. Under Mrs. Hogg's able and experienced care the two schools—each mill had its own premises and teachers—made rapid progress until in 1911-12 they reached a size that made the old bungalows in which they were located no longer suitable. Moreover, their supervision now required more time and attention than Mrs. Hogg could spare.

The Joint  
School.

The Management were once more faced with a difficulty : they must either restrict the activity of the schools, close them down or entirely remodel them. After much consideration it was decided to build a Joint School of suitable dimensions for both mills and to give it a permanent full-time staff. The Engineer of the Corporation of Madras was approached for a type plan, and this plan, altered in some respects, forms the basis of the lay-out of the main school buildings as they at present stand.

Compound  
and building.

The schools now (1917) stand in a large compound of about 18 acres which is laid out with gardens, playing fields and a gymnasium. The main building consists of—

- (a) An administration block for Joint Principals, teachers and writer.
- (b) The school building consists of 8 class rooms and 1 assembly halls while an annex consists of 2 senior class rooms for senior boys, a drawing class room and a technical lecture room.
- (c) Immediately behind the annex are the kitchen, the sick room and the nursery.
- (d) The workshops for the teaching of elementary carpentry, blacksmith work and tailoring are in a separate open air shed building forming the east boundary of the school compound.

Staff.

The staff difficulty was solved by obtaining the services of the present Joint Principals at the end of 1912 as general supervisors and organisers of the work done by the other teachers in the school. The Principals are European ladies of experience, one being a graduate, the other a specialist in kindergarten studies.

Pupils.

It may be interesting to trace in fuller detail the various developments that have taken place since the inception of the scheme. Originally only half-timers were taught. These are boys



over 9 and under 14 years of age who spend not more than half the day in employment in the mills. All half-timers before employment are passed for work by a medical officer appointed by Government. During the other half of the day provision was made for their instruction in the three Rs in the mill school. Subsequently continuation classes for the purpose of offering opportunities to half-timers on becoming full-timers to continue their instruction were instituted. After that came the experiment of night lectures on technical subjects.

The first result of starting the schools appeared to be to foster Vocations. or to inculcate a scholar's ambition to become a writer in the mill. The prospects of a mill writer are small and the object of the schools being to train workmen, the question arose as to how to turn the boys' ideas to something more useful and industrial. To effect this small instructional classes of a technical nature were started so that boys might follow their bent when they become full-timers. Happily this has had the desired effect.

It is to be noted that attendance has been quite voluntary on Attendance. the part of all pupils. No compulsion of any kind has been resorted to, though it has been considered more than once and constantly rejected. The Madras workman is not in general fond of factory life. The hours are long and he is quite unused to the discipline and to intense application. It is found, however, that the boys who attend school are cleaner, smarter and more intelligent and more healthy than those who do not and since only a little more than one half of the total number of boys employed do attend school, there is ample material for making a sound comparison. The school training is, moreover, a good preparation for the routine and discipline of the mill.

The day classes provide for half-timers employed in the mills Half-timers. and other boys under 14 years of age, the latter being the children of the workpeople employed in the mills. Half-timers, that is to say, boys over 9 and under 14 years of age are employed in the mills—after having been passed fit by the medical officer—in two shifts, and the school is consequently divided into two sections:—

*A Section.*—The boys who attend morning school from 7 to 10 A.M. work in the mills from 12-30 to 6 P.M.

*B Section*.—The boys who attend afternoon school from 2 to 4-30 P.M. work in the mills from 6 A.M. to 12 noon.

Young children with relatives working in the mills freely attend school with the half-timers both morning and afternoon. They are too young to pass the doctor for work but usually develop into half-timers in due season when able to pass the medical inspection.

Half-timers' classes have hitherto been carried up to the fourth standard, but it is hoped before long that they may attain to the sixth standard.

Each month the *A Section* of half-timers change hours with the *B Section*, i.e., boys working from 6 A.M. to 12 during one month work from 12-30 noon to 6 P.M. in the next month and *vice versa*.

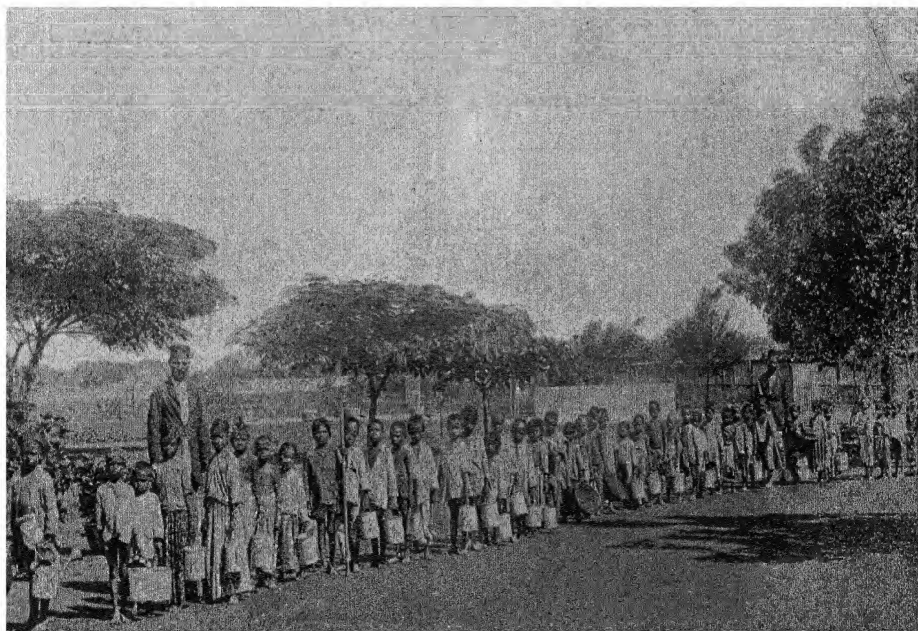
Apprentice-  
ship.

In order to induce the half-timers to undergo instruction teachers are allowed and encouraged to go into the mills to look for absentees, but no compulsion is used; and boys who hold a fourth standard certificate have their applications registered to work in the smaller departments employing half-timers, or to become apprentices, when they attain the age of 14, in a mechanical department. These apprenticeships are a great inducement to boys who are fond of carpentry and blacksmith work. Maistries and clerks who can afford to, keep their boys out of the mill and send them to the school until they are 14 years of age. They then start work as apprentices (carpenters, fitters, blacksmiths, mechanics, etc.), with a good chance of promotion. There are always fourth standard boys who have not worked as half-timers waiting till they are old enough to be employed in a mechanical department of the mill.

Half-timers may be transferred to full-time work at any time of the year, dependent on when they attain the age of 11 and are considered fit by the doctor, and the school boys are given preference over other applicants. During each year about 100 boys become full-timers. Half-timers when they become full-timers are encouraged to continue their classes in the night school without interruption and it was for this class of workpeople that the night school was first established. Some, however, live at too great a distance to allow them to attend the night school.



3. Buckingham and Carnatic Mills, Madras. Kitchen room for boys.



4. Buckingham and Carnatic Mills School. Boys going to work in garden.



As the day school is intended mainly for half-timers, *i.e.*, <sup>Courses of study.</sup> boys with very little spare time and with the urgent need of earning their own livelihood as soon as possible, the subjects chosen are as few and as practical as possible. The chief points kept in mind in the formulating of the courses are :—(a) The shortness of the school life of the half-timer. (b) The fact that the parents of the children are uneducated and do not know the value of education. (c) The tendency of the workpeople to despise manual work and to aspire to clerical work. (d) The fact that since half-time work leads in itself to nothing—is in fact a blind alley,—the boys need a chance of learning some work or profession which will enable them to earn, when grown up, a livelihood.

The subjects taught in the schools are :—Reading and writing in the vernacular (Tamil, Telugu or Hindustani), English (chiefly conversationally), arithmetic, drawing, gardening, hygiene, and practical work in carpentry, blacksmith's work and tailoring.

In the lower classes (kindergarten to standard II) the work done does not differ materially from that done in any primary school. In the upper classes (standards III and IV) general knowledge is taught by means of conversational lessons in geography, history and civics, while the ordinary subjects are continued to standard IV.

There is school on every working day of the week including Saturday mornings. Saturday afternoons are half holidays.

During the first years of the existence of the school it was found that the height of most boys' ambition was to get a post as cloth marker in one of the mills. In this position he might earn a salary of from Rs. 10 to Rs. 12 per month at the most, with no prospects of promotion, the work being of the very simplest nature but such as might be done sitting down with a coat on. To correct this tendency instructional classes were started in the following order :—(1) Gardening, (2) Washing and ironing clothes, (3) Carpentry, (4) Painting, whitewashing and small repairs to <sup>Practical</sup> school premises, (5) Blacksmith's work, (6) Tailoring.

It is hoped in time to develop and extend these classes. The largest opening in Madras would appear to be gardening, but curiously enough this is the most difficult in which to make

headway since it is most difficult to find teachers of any kind to give the necessary instruction.

With the practical and industrial classes boys are now learning, if not the dignity of labour, at least its higher remuneration and instead of being inundated with applications for writerships there are always more applicants than vacancies for work in the mechanical departments. When a vacancy occurs for a carpenter, blacksmith, fitter, wireman, etc., a school boy generally gets it. They are given preference owing to their knowledge of English and they rise in time to act as "Maistries" in charge of sections. A knowledge of drawing, which enables them to follow plans and understand the importance of precise measurements, is insisted upon. Hence drawing classes are well attended.

#### Equipment.

Industrial class rooms are fitted with necessary tools. In the tailors' shop are sewing machines. In another shed there are exhibition boards fitted with various parts of the machines used in the different departments of the mills. These parts have at their foot the English names printed and the children from the first standard upwards are taught the names of each part. This not only teaches them practical English but familiarises them with the details of the machines they may be called upon to work on in the mill. There is a spinning machine which the boys may examine and clean and a hand loom is fixed and used for practical demonstration work in connection with the weaving lectures in the night school. There is also an open air kindergarten room with wall blackboards for free arm drawing and a concrete platform for clay modelling under a shady tree.

#### Night classes.

In the night school the subjects taught are reading and writing in the vernacular, English and arithmetic—which are carried on up to the seventh standard.

Technical instruction is given in the theory of spinning, weaving, practical electricity, geometrical drawing, machine drawing and building construction, by foremen and draughtsmen from the mills; and every few months an examination is given by the European officers of the respective departments. They thus may note any special men for promotion in the mills and give them better positions on increased pay according to their merits. The school awards suitable prizes to those who

gain top marks. These classes have only been started within the last three years and the work is of an elementary nature so far. The great difficulty is that of finding suitable teachers on the textile side.

Though there is no compulsion, boys are induced to attend **Prizes.** school regularly by attendance prizes of banians, shirts, coats, etc. The night school boys have warm banian prizes at Christmas time and the day school children have prizes each half-year. The banians are obtained from the Bangalore Mills under the same management and other garments are made by the children themselves in their tailoring classes. The material used consists of short lengths and damaged pieces which are supplied to the school by the mills. To the beginners and small children monthly prizes of very small toys are given if a full attendance has been put in. Working boys are so poor that even the smallest toy is probably unseen in their own homes and is a joy to them and costs the management very little.

Thus the school becomes probably the happiest place for these children and when once their habits are formed they are found to attend the school from boys to men. They are free to spend all their spare time in the compound, and are constantly in the extensive play grounds about the school. They grow up not only more intelligent and friendly but better behaved and more cleanly in their habits than those who do not seek the benefits of the mill school.

The crèche.—This institution has an ayah to take charge of small **The crèche.** children and babies deposited by parents of children who are sent to school with brothers. They are kept clean and given toys to play with. When small kindergarten children are tired or cross they are sent across to the crèche or nursery for play or sleep. The ayah also collects the children from the mills at 6 A.M. or 12-30 when the shifts change. In this way the babies have pleasant healthy surroundings in which to play and the care of a home is given them, when otherwise they might have to play in the streets or be confined in unhealthy homes in crowded localities. In many cases the children are motherless and if there were no crèche the father could not work in the factory, where small children are not allowed.

**The kitchen.**

Some children bring their food with them and eat it under the trees in the compound between school hours, but the majority go home for their food. In some cases there is a difficulty for boys to get their food in order to be in time for school and for the convenience of such boys a kitchen has been built adjacent to the school. There is an ayah in charge to store away the boys' own meal tins in the store room provided for the purpose. The ayah cooks food brought, keeps water boiling and makes coffee and tea which are supplied to the children at cost price. At recess time, both morning and afternoon, boys go to the kitchen for a few pies' worth of food or coffee. The boys are encouraged to use the kitchen themselves for cooking or heating up their own food between 10 A.M. and 2 P.M. This gives ample time after school and before the change of shifts. No charge is made for firewood or boiling water. Pupils who attend the night school leave the mills at 6 P.M. Those who live at a distance may come and take coffee and tea and bread from the kitchen before they begin classes. The ayah remains on duty until night school is started. The kitchen has been started only recently and the boys are slowly taking advantage of it. It is the policy of the Management to apply no pressure and to allow the boys slowly to assimilate developments.

**Games, etc.**

Drill, gymnastics and games are taught throughout the school. There are sheds for storing games and gymnastic apparatus and gardening tools and buckets. There is a small open air bath and *dhobykhana* where practical hygiene is taught and the boys are allowed to wash their bodies and their clothes at any time. The school provides charcoal flat-irons to enable the boys to do their own ironing. On Saturday afternoon and all day on Sundays the washing tubs, drying lines and irons are in great demand.

**Medical inspection.**

Every week the mill doctors medically inspect the school and look after the health of the boys. There is a small dispensary with simple remedies which are available at all hours of the day. The doctors have a separate store for bandages and medicines which may be needed. When a boy attends school with fever or any slight indisposition he is given suitable medicine and sent to



lie down or sleep on a mat in the sick room. This is preferable to sending boys suffering from small ailments to their own homes where they would probably be confined to badly ventilated huts.

For some years an old bangalow has been used as a reading room and institute. In November 1916 a new institute was added. This place may be used all day by any of the employees when off duty and the school boys also may borrow books from the library (English, Tamil, Telegu and Hindustani). Librarians are always in charge from 5-30 in the evenings; indoor games are played and a gramophone is provided with vernacular as well as English records. The large verandah is set with small tables and chairs and is much used for general reading, newspapers and periodicals being provided.

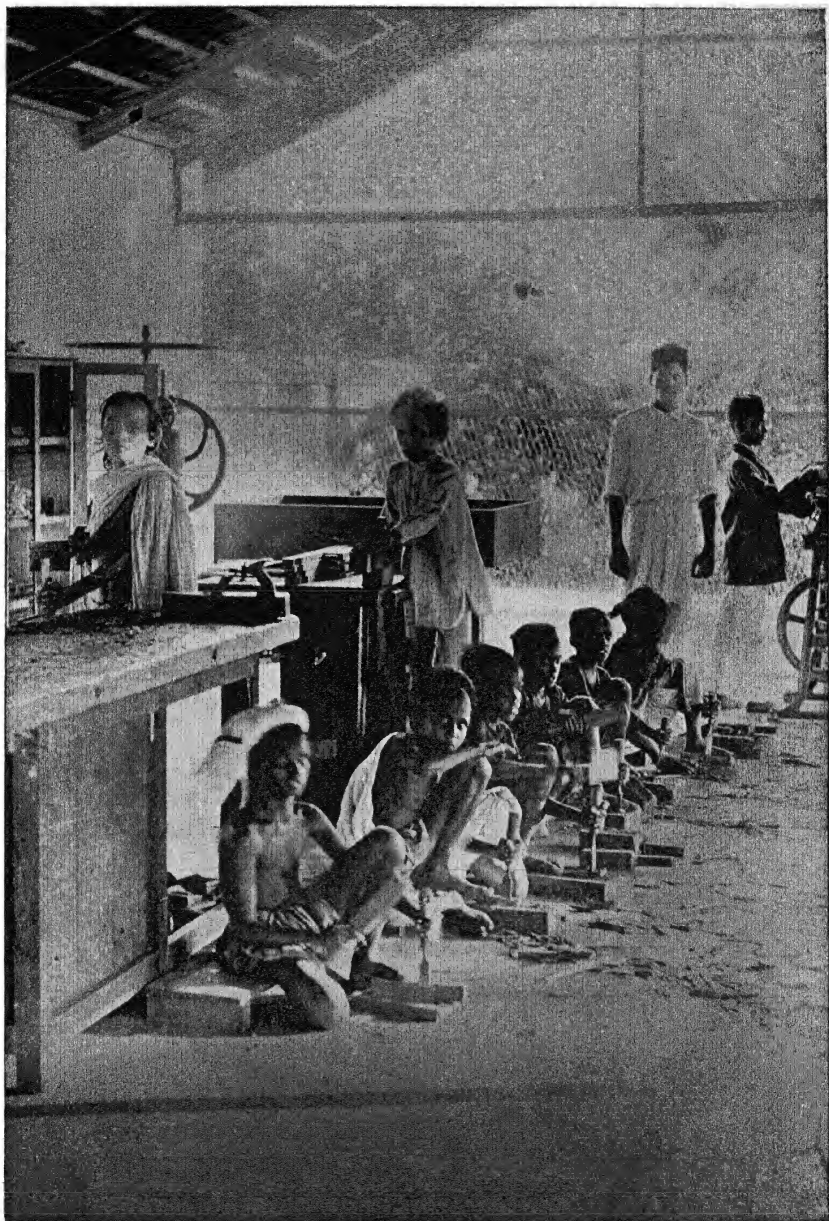
The school children have been carefully watched and so far as the management is able to judge they are all the better for the system of training they undergo—coupled as this is with the use of a recreation ground where they can play or sleep for the remainder of their time. There are no signs of physical exhaustion; on the contrary, the boys look better and stronger for the clean life that the school authorities require them to lead.

As to the effect on the output of the mills this is difficult to estimate; they are only boys performing light and necessary but very simple work, but the management of the mills maintain that the school has improved the relations between the general body of the workpeople and the employers while the European officials assert that they can easily pick out the boys attending school from the others by their greater intelligence, brightness and cleanliness.

## BUCKINGHAM AND CARNATIC MILLS SCHOOL.

*Pupils at School from 1906 to April 1917.*

Places where the school boys were located.	Years.	DAY AND NIGHT CLASSES: AVERAGE NUMBERS AT THE END OF EACH YEAR.			Total.	Number of Tea- chers.	REMARKS.
		A.M.	P.M.	Night.			
Buckingham Mill Shed.	1906	85	72	...	157	6	
"	1907	97	98	..	195	6	
"	1908	93	89	82	264	10	
Carnatic Mill Shed.	1906	...	...	...	...	...	
"	1907	...	...	...	...	...	
Buckingham Mill in separate bungalows.	1908	82	82	59	223	9	
"	1909	97	97	81	275	11	
"	1910	107	106	87	300	14	
"	1911	106	102	99	307	14	
"	1912	116	111	103	333	14	January to October.
Carnatic Mill in separate bungalows.	1909	97	100	65	262	11	
"	1910	100	102	67	269	11	
"	1911	92	93	88	273	11	
"	1912	99	102	89	290	13	January to October.
Buckingham and Carnatic Mills in one building.	B } 1912 {	{ 104	89	83	281	13	November to Dec- ember.
	C } {	{ 94	87	62	240		
"	B } 1913 {	{ 98	96	98	292	26	
	C } {	{ 92	91	69	253		
"	B } 1914 {	{ 115	112	91	318	26	
	C } {	{ 116	114	83	313		
"	B } 1915 {	{ 132	126	93	351	26	
	C } {	{ 123	120	80	323		
"	B } 1916 {	{ 174	169	119	462	29	
	C } {	{ 168	157	99	424		
"	B } 1917 {	{ 189	185	141	515	29	January to April.
	C } {	{ 170	166	109	445		



5. Buckingham and Carnatic Mills, Madras. Carpentry class.



## 2. TEA GARDEN SCHOOLS.

### (1) *In the Darjeeling District.*

The work people in the Darjeeling Tea Plantations are almost <sup>The people.</sup> exclusively Nepalese. Many of them have been settled for two or three generations on the gardens and fresh recruits from Nepal are being constantly added. A planter needs at least one coolie per acre of tea. The coolies generally live in "lines" at several centres which may be distant from each other.

Child labour is valuable on the plantations, and where the labour force is poor it is difficult to get any but the very tiny children to a day school. Consequently in many cases the night school is the more important section. There is usually, however, a small nucleus of the children of the headmen on the garden for a day school.

The Church of Scotland Mission began schools on the tea <sup>Scottish</sup> gardens in the early seventies and the tea garden education is <sup>Mission.</sup> still almost entirely under the direction of the Mission. It cannot yet be said that all the managers are enthusiastic over the education of the coolie children, but there has been of recent years a distinct increase of interest and at the same time there has been an increasing desire on the part of the parents and children for a school education.

The instruction is entirely voluntary and as a rule no inducement is held out to encourage attendance. On the contrary it means a sacrifice for a parent to let a child of even 9 or 10 years of age attend the day school as the child might earn from Rs. 2 to Rs. 3 a month at work.

The tea garden school is generally of the ordinary lower <sup>Classification.</sup> primary grade. The planter does not usually care for a higher class and as a matter of fact the proportion of the pupils who pass through the second standard is not great. But a sprinkling of the better-off pupils manage to get to a higher grade school at Darjeeling, Kurseong or Kalimpong and there are a few Government scholarships to upper primary and middle schools.

Teachers.	The teachers are trained in the Church of Scotland Training Institution at Kalimpong. They are Nepalese and Lepcha. Usually the first book in Nepalese is used and thereafter the language is Hindi, of which Nepalese is a patois.
Grants.	Government offers a grant of Rs. 12 a month to tea garden schools and the plantation generally gives Rs. 8. Any balance of expense is met by the Mission. No fees are charged. When the number of pupils exceeds 20, a pupil teacher is usually provided.
School-houses.	The school-houses are in most cases provided by the plantations and in their structure and equipment there has been a marked improvement in late years.
Value of schools.	The old prejudice against education on the ground that a good coolie was spoiled by education is passing away and it is now recognised that the presence of a school on a garden is an attraction for the labour force. The most thoughtful of the planters are keen on schools which they believe improve the labour.
	Some years ago at a conference on Tea Garden Schools held at Darjeeling, Mr. Claud Bald gave striking testimony to the value of a school on the Lebong Tea Company's Estate and showed by tracing the subsequent careers of the pupils over a number of years that the great majority had turned out satisfactory workers on the estate while the only drawback to the school was the temptation to neighbouring planters who did not have schools to entice away his boys for billets which required a knowledge of reading and writing.
	There is still ample room for more schools on the gardens which now have none and also on gardens where one school can only reach a proportion of the children.

(2) *In the Dooars—by W. J. Travers.*

The people.	Tea estates in the Dooars are populated by the people drawn from many races and castes. A few of the gardens to the north have a large number of Nepalese of various castes, and small communities of hill people are often found here and there on many other estates. A very large majority, however, of the coolie population is drawn from the aboriginal races who reside in Chota Nagpur, the Santhal Parganas, and Singhbhum. From Chota Nagpur come the Oraons, Mundas, Kharias, and those castes—such
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as Lohas, Goraiths, Baraikhs—who may be described as semi-Hindus; from the Santal Parganas the Santals themselves and Mal-paharias; and from Singhbhum Santals of the branch of that race who are there resident, and the Ho or Larka Kol, Mundas, Tantis, and others.

Now all these peoples are distinguished by many attractive qualities, but when one considers them in regard to the education of their children, and especially to that education when residing upon a tea estate, many difficulties at once present themselves.

First and foremost, of all the races which I have mentioned, the Nepali is the only one wherein parents desire that their children should be taught. Of the others it may be said that they are contented with their condition of life, very many individuals save money which they invest in cattle and such like forms of wealth, and they think that what satisfies them will be good enough for their children. A day school on a garden attracts hardly any children at all and since the labourers are entirely free, bound by no form of contract of any kind, it follows that the manager cannot compel the coolie father to send his children to school. The coolie himself only works for about 17 days in a month, and he prefers his children to add a few rupees to the family exchequer by doing the light work provided for them on the estate, or to look after his cattle on the grazing ground. Experience, therefore, has taught that the only school which children attend is one which is open for a few hours in the evening. At such a school a few children will attend for simple instruction. Their parents—especially should these be Sirdars or Headmen—recognise that the knowledge of reading, writing and simple arithmetic, will be an advantage in the calculation of accounts of pay and so on. But a very small number will attend even these schools. For instance, on this estate (Baradighi) there are 15 to 30 scholars out of a total population of about 2,500 people.

Besides the apathy of the people, there are other difficulties in the working of the school. Many races are resident upon the one estate, and nearly all have their own language. The Nepali (who recognizes the advantages of education far more than the plainsman) and the people from Chota Nagpur use the Devanāgri

script, while the Santals use the Bengalee, which language many of them speak in addition to their own.

Classes of  
school.

The classes of schools in the Dooars are three—‘A Class’, ‘B Class’, and ‘C Class’, and these schools receive assistance from Government as follows:—

‘A Class’ (lower primary school): built, equipped and maintained by Government. The grant for the initial cost of each school building is Rs. 300 and for appliances Rs. 100; the recurring cost for each school is, for teacher Rs. 10 and for contingencies Rs. 2 a month.

‘B Class’ (private aided school): under the complete control of the managers of the tea gardens who have power to appoint and dismiss teachers. These schools are open to the inspection of the officers of the Educational Service, and receive a subsidy from Government, *i.e.*, grant for the initial cost of each school building Rs. 100 and appliances Rs. 50; recurring cost for each school for teacher Rs. 5 and contingencies Rs. 1 a month.

‘C Class’ (unaided private school): similar to ‘B class’ schools, but open only to informal visits from the Deputy Commissioner or Sub-Divisional Officer, and not under the control of the Departmental Inspecting Officers. The grant for the initial cost of each school building is Rs. 100 and for appliances Rs. 50.

Teachers.

Next we come to another great difficulty—the teacher. It is practically impossible for the salary offered to obtain a teacher who has been trained in any way. Generally for the ‘A Class’ schools one of the Babus upon the garden undertakes the work, and for ‘B’ and ‘C’ Class schools an intelligent duffadar (a man in charge of a squad of coolies) is appointed. Occasionally one finds one of these who has been educated at the Mission schools in Chota Nagpur and these of course make the best teachers.

Buildings.

The school-houses are small and the equipment is but elementary, but it may be said that it would be a waste of money to spend more upon these objects. At the present



time I am of opinion—and I am sure that anyone thoroughly acquainted with the conditions will agree with me—that the system in the Dooars supplies all the instruction which it is possible to impart. In the districts from which the aboriginal races come the people are not so well off relatively as they are upon a tea estate. It may be possible there gradually to increase the number of scholars and to raise the standard of education. Should this ever happen, there would be an improvement in the Dooars.

With occasional exceptions, the tea garden manager encourages his school so far as he is able but he cannot effect much. The indifference of the people, the irregular attendance of the children, and the poor education of the teacher, prevent much progress. General.

The children who work upon the garden do so for only about 4 hours, until about 1 o'clock, and attendance at school does not tire them in any way, for they have the whole afternoon for rest and play. Many children, however, do not work upon the garden at all.

There are over 100 gardens in the Dooars, and in the future, when finance permits Government to devote money for the purpose and for the increase of pay, I should like to see the establishment of a central training school for the teacher. A year's instruction would fit a youth for the position. At present it is so difficult to obtain a suitable teacher that occasionally a manager gives it up in despair, and a school is closed.

### (3) *Baradighi Tea Garden School.*

Baradighi is a typical tea garden of the Dooars. It is situated about 25 miles south of the first and smaller ranges of the Himalayas; it has the usual large rainfall of the Dooars (140 inches) and a sharp cold weather which lasts for over 4 months. The population is between 2,200 and 2,500 people drawn from the aboriginal races of Chota Nagpur, the Santal Parganas and Singhbhum. The school is a small wooden building which will hold 35 to 40 children, but the attendance ranges between 15 and 30. During the long evenings in the hot weather many more children attend than at the close of the rainy season, when but few can be persuaded to come. They vary in age and are drawn from many The school.

ances, though the Santals of Chaibassa and the semi-Hinduised castes of Chota Nagpur supply the majority. The teacher is an intelligent Chaibassa Santal, and he is quite able to give the simple instruction which comprises all the education that the children can be persuaded to undertake. To learn to read and to write is the summit of their ambition. Rarely, very rarely—perhaps one in 250 children—one finds a boy who wishes to go further and who learns to read and write English by the aid of the estate clerks. The school is open from about 5 until 8 p.m. in the cold weather, and perhaps an hour longer in the hot weather. After they have made a beginning, the children seem to enjoy the few hours' instruction, but they mature rapidly and soon desert the school for the amusement of the lines—games with their fellows, dances and singing. Garden work, should it be done, is over by 1 o'clock for 6 months in the year and indeed for the small children at that hour for most of the year, though the bigger boys—no girls will attend—earn extra pay, by working longer hours in the rains. The few hours mental work does not seem to exhaust them at all—indeed, many of these children are very intelligent, and when at last these virile and robust peoples do learn the advantage of education, they should have a future before them.

#### Grants.

The school received a grant of Rs. 150 for the building of the house, and has a monthly grant for the teacher's pay of Rs. 6 per month. During the hot weather a second teacher—a Chota Nagpuri—is employed, but it is most difficult to persuade anyone to undertake the work.

### 3. COLLIERY SCHOOLS NEAR GIRIDIH.

The system of schools on the estate which the East Indian Compulsion. Railway owns near Giridih in the Hazaribagh district is unique, at any rate in the Province of Bihar and Orissa, in two respects. In the first place education is compulsory for all the boys on the estate between the ages of 5 and 12 (the limits are approximate only) and in the second place, while the instruction is confined strictly to the vernacular, the boys who do best in the primary classes are taken on to an industrial school where they receive a technical and practical training which adds considerably to their value as workmen.

The estate was purchased by the Company in the early sixties The estate. and consisted until recently of two separate colliery areas, one called Kurhurbaree and one Serampore. In 1907, however, the narrow strip of land which separated the southern ends of these two blocks was purchased from the Bengal Coal Company and the property became a continuous one. It consists of rather more than 4,000 acres with a population of about 14,000 souls. The number of coal mines is 12 with a depth ranging from 143 to 1,000 feet, and the annual output of coal is about 800,000 tons. The mines are fitted with electricity, and the plant, including the by-product plant attached to the coke ovens, is up-to-date in every way. The miners get a holiday every Sunday.

The estate is managed by the officers of the East Indian Railway and from the fact that 99 per cent. of the population belongs to the labourer class it will be seen that the Company has adhered strictly to the principle of keeping its land for the benefit of its own employees. The density of the population being only about 3 to the acre, while the average family consists probably of not less than 6 persons, the houses are in no way crowded and as far as possible each house has a piece of land attached to it which the miner and his family can cultivate in their leisure moments. Rice-land, which is the most valuable, is reserved for actual miners; other labourers can only have pieces of the higher ground. The miners' houses are mostly built of mud or bricks set in mud with roofs of country tiles carried on bamboos; a type generally in use consists of two rooms of 15' x 10', a verandah, and a small courtyard enclosed by a wall 5 feet high, the whole costing about

Rs. 360. In some cases the houses have been built by the Company, in others the Company has only supplied the materials.

**First school.**

The first school on the Colliery was opened on May 11th, 1888, by Dr. Saise, who was then in charge of the estate. The object was twofold. First he wished to improve the efficiency of the work in the mines. He considered the adult workmen too old to learn, but hoped by educating their children to effect a substantial improvement in the intelligence of the next generation and to instil into them some form of discipline. In the next place he wished to find a useful occupation for the children, whom he found accustomed to stand about close to their parents while the latter were at work, thus not only hampering their parents but placing themselves in considerable danger of accidents. Three more schools were opened in December 1888 and when Dr. Saise retired and was succeeded by Mr. T. H. Ward in April 1905 the number had risen to 24. A uniform fee of one anna was charged until 1893 when education was made free and at the same time compulsory for all boys on the estate (for girls it is still optional), while on February 1st, 1895, the Beniadih Industrial School was opened and Dr. Saise himself commenced to teach English there.

**Stipends.**

During Mr. Ward's time two important changes were made. The teaching of English in the industrial school was stopped, Hindi being made the medium of instruction throughout the schools, and it was decided to give small stipends to all those boys who succeeded in passing the upper primary course and entering the industrial school. The stipend is one anna a day for the first year, two annas for the next eighteen months and three annas for the remaining six months of the course. Twenty-eight stipends of four annas a week, known as colliery scholarships, are also given to boys in the upper primary school. The stipends given in the industrial school do not of course measure the value of the boys' work; they act as a temporary stimulant; but the real incentive is the prospect of wages which will probably rise gradually to twelve annas a day as soon as the course is successfully completed. Mr. Ward retired in April 1915, by which time the number of colliery schools had risen to the present total of 31.

**Organisation.**

The organisation of these schools is somewhat peculiar. At the summit comes the Beniadih Industrial School, which receives

only pupils who have passed the upper primary standard. Below this comes one upper primary school, that at Mohilichooah. This school, which was opened in December 1888, contains only the upper primary classes. Next come four lower primary schools, each containing standard II only, and lastly twenty-five elementary schools each containing standard I and the two infant classes. The first and second standards have been separated as it was found that before this was done the teachers paid too much attention to the latter and neglected the former. The number of pupils is as follows :—

Industrial school	.	.	.	52	} all boys.
Upper primary school	.	.	.	148	
Lower primary schools	.	.	.	119	
Elementary schools	.	.	.	1,758	including 303 girls.
Total	.	.	.	2,075	

65 per cent. of the pupils are Hindus, 33 per cent. Muhamadans and 2 per cent. aborigines. The Hindus belong mostly, but not exclusively, to the lower castes ; where Brahman boys attend the schools they sit contentedly among the *dhobis* and *chamars*.

The management of the schools is vested in a general Management committee assisted by two sub-committees, one for Kurhurbaree and one for Serampore. The General Committee consists of 27 members with the Colliery Superintendent as president and the accountant of his office as secretary. The remaining members are managers or assistant managers of collieries, contractors, sardars, deputy overmen, inspectors and the headmaster of the Industrial school. Besides retaining control over the decisions of the sub-committees this body has complete control over the industrial school, sanctions all new appointments, makes special grants, promotes school employees, checks accounts, grants leave (other than casual leave) and deals with all questions relating to buildings except petty repairs. The sub-committees each consist of 17 members, all Indians, and mainly contractors or deputy overmen. Babu Haranath Singh, a prominent contractor who takes

a keen interest in the schools, is president of each, and the inspecting *pandit* whom the Company employs to look after the schools is their secretary. These committees deal with questions relating to attendance at school, obtain information from the *chaukidars* and similar officials as to the boys of school-going age and then approach the parents, whom they may ask the General Committee to fine if they fail to send their children to school. They may sanction petty repairs to buildings, grant casual leave and recommend other leave to the *gurus*, recommend fines on *chaukidars* who fail to report cases where boys old enough to go to school are not yet sent, on boys who play truant and on unsatisfactory *gurus*, while in cases of suspension, dismissal or appointment they make recommendations to the General Committee.

#### Buildings.

The school buildings are of various kinds. The industrial school has a large hall of 45' x 24' with a terraced roof. The upper primary school has 4 rooms of 25' x 15' with a tiled roof and a verandah on one side. The other buildings are of a simpler kind, most of them containing only one large room. Some are built of brick, others of mud, and the roofs are of tiles or corrugated iron. Where the room is more than 12 feet wide the roof is usually supported by pillars which serve to divide the teaching space into two halves. The floors are for the most part covered with cement and serve alike as benches, slates and blackboards for the children in the lower forms. The floor space for each pupil ranges from 4 to 19 square feet, the average being about 9½. The cost of these simple buildings is about Rs. 300 apiece and has been met entirely by the Company.

#### Equipment.

Except for the industrial school, which has recently been provided with an excellent set of drawing models, and the upper primary school, which has the necessary maps and teaching appliances, the equipment of the schools is of a very simple kind. No furniture is provided for the children and though each teacher has his chair or stool they have not all been provided with tables. It would make the schools more attractive if a few pictures and diagrams were supplied to adorn the walls. When funds permit, it might be well to provide paper for the boys to write on at a somewhat earlier stage than at present. The practice now is for paper to be used first in the upper primary classes.

As has already been stated, education is compulsory for all boys on the Company's estate. Nor are the Company content with a purely nominal compulsion. They employ six school *chaukidars* whose business it is to visit the schools as soon as the classes meet and to go in search of the absentees. Again, the three committees contain in the aggregate a large number of persons each of whom is required to do what he can for the well-being of the schools and to secure regular attendance. Lastly, there are the sub-committees who can recommend fines for absence.

The schools being intended primarily for children of the Company's employees, for whom education is free and, in the case of boys, compulsory, it is not surprising to see small fees charged to other children. The charge made is two annas in the infant classes and four annas in standards I to IV; there are no outside boys in the industrial school, though if qualified boys were to come forward they might be admitted and would in that case draw the same stipends as the other boys. The total sum realised in fees is only about Rs. 9 a month.

The theoretical subjects of study in the industrial school, to which  $4\frac{1}{2}$  hours a day are devoted, are the following :—

Courses of  
study.

- |                              |  |
|------------------------------|--|
| (1) Arithmetic . . .         | } all taught through the medium<br>of Hindi. |
| (2) Mensuration . . .        |  |
| (3) Practical Geometry . . . |  |
| (4) Mechanics . . .          |  |
| (5) Freehand Drawing . . .   |  |
| (6) Machine Drawing . . .    |  |
| (7) Electricity . . .        |  |
| (8) The Steam Engine . . .   |  |

The practical work, which occupies 4 hours a day, is carried out in the tinsmith's shop, fitter's shop, machine shop, loco. shop, carpenter's shop or foundry. The course of study lasts for three years, after which the boys are fit for employment as fitters or draughtsmen. The school is regularly visited by the Inspector of technical schools. In the upper primary and lower primary schools the departmental curriculum is followed in full, but in the elementary schools only four subjects are taught, namely reading, writing, mental and written

arithmetic and drill. This narrowing of the curriculum and exclusion of such objects as story-telling, nature study, object lesson, drawing, modelling and kindergarten work, possibly tend to make the instruction dull for small children. It might be useful for the committee to co-opt the local sub-inspector of schools as an adviser in questions of this kind.

**Examinations.** The pupils of the industrial school are examined at the end of each year's course, the headmaster himself being the examiner. No formal certificate is given at any stage. The annual examination of standards IV and II is held in the office of the Colliery Superintendent and is conducted by a board consisting of the teachers of the industrial school, the Company's inspecting *pandit* and some of the clerks in the Superintendent's office. The other classes are examined by the *gurus* themselves, subject to the approval of the inspecting *pandit*.

**Staff.** Apart from two sewing mistresses, the total number of teachers employed in the Colliery schools is 61, including the two teachers at the industrial school who are passed overseers from the Bihar School of Engineering and draw salaries of Rs. 90 and Rs. 50 respectively. The head *pandit* of the upper primary school has passed the vernacular mastership examination and draws Rs. 20; the second *pandit* of the same school, who has passed the middle vernacular examination, gets Rs. 15. The others are as follows :—

Qualification.	Number.	Pay.
Guru training school passed	9	Rs. 12 to Rs. 8
Middle English	3	„ 12 to „ 8
Middle vernacular	4	„ 12 to „ 8
Upper primary	15	„ 9 to „ 7
Lower primary	26	„ 8 to „ 7

Teachers whose salaries are Rs. 15 or over are allowed the privilege of subscribing to the East Indian Railway provident fund, and those on lower pay to the Colliery provident fund. A gratuity is admissible after 15 years' service and a free pass home over the East Indian Railway is given twice a year.

**Training.** Two years ago a scheme was mooted for establishing a special training class for the *gurus* from these schools; but it was dropped, as it was felt that, to justify it, it would be necessary to train 15 or 16 *gurus* at once, and that



this was a larger number of teachers than could be spared at one time. Three teachers, however, appeared at the *guru* training school examination in 1916 and the number of trained men will increase gradually. The trained teachers might be made to give model lessons for their untrained colleagues to watch and the latter would probably profit to some extent. But trained teachers, for the proper exercise of their craft, need a certain amount of apparatus which they cannot themselves make, such as a school garden, a small library, maps and object lesson sheets. The upper primary school is fairly well provided in these respects; but if similar arrangements were made for the schools of lower status, it would probably add a good deal to the brightness of the teaching and so render the children more eager to come to school. At present they come mainly because they must, the only inducements held out being the stipends in the upper primary and industrial schools which with rewards and prizes of all kinds cost the Company Rs. 200 a month, and the gifts in the shape of clothes, slates and books for the boys and sewing materials for the girls which Babu Haranath Singh frequently distributes.

The cost of the schools amounts to about Rs. 978 a month, Cost. the sources of income and expenditure being as follows:—

	Rs.
<i>Income.</i> —Government grant to the industrial school . . .	50
District board grant to the 28 schools in the district board area.	387
Municipal grant to the 2 schools in the municipal area.	29
Fees realised . . . . .	9
Railway grant . . . . .	503
Total . . . . .	<u>978</u>

*Expenditure —*

Industrial school—	Rs.
Teachers . . . . .	140
Stipends . . . . .	100
Contingencies . . . . .	10
Total . . . . .	<u>250</u>
Primary schools . . . . .	576
Rewards and prizes . . . . .	100
Furniture, equipment and repairs . . . . .	42
Contingencies . . . . .	10
Total . . . . .	<u>978</u>

Benefit of  
scheme.

The schools as we have seen were started mainly on utilitarian grounds. On March 22nd, 1889, the Board of Directors of the East Indian Railway wrote to their Agent in India: "Dr. Saise is of opinion that their establishment is likely to prove of considerable benefit to the Company in keeping the people on the estates and in enabling the children as they grow up to serve the company to better advantage." That at first the schools were not popular is probably indicated by the need for making education free and compulsory which was found in 1893. That they are not very popular now among the smaller children is perhaps indicated by the fact that the average attendance is only between 70 and 80 per cent. But they serve two very important ends. In the first place they supply the collieries with workmen who have been accustomed to obey in school. In the second place they open to the clever boy a door by passing through which he may do better work and obtain higher wages than his less clever colleagues, thereby benefiting both company and employee.

## **Educational Publications of the Government of India.**

### *Quinquennial Reviews.*

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- Progress of Education in India, 1897-98 to 1901-02. Fourth Quinquennial Review. By R. Nathan, C.I.E. 2 Vols. Rs. 7.
- Progress of Education in India, 1902-07. Fifth Quinquennial Review. By H. W. Orange, C.I.E. 2 Vols. Rs. 5-8-0.
- Progress of Education in India, 1907-12. Sixth Quinquennial Review. By H. Sharp, C.I.E. Vol. I, Rs. 4. Vol. II, Rs. 2.

### *Reports.*

- Report on the conference on the Education of the domiciled Community in India, July 1912. Re. 1.
- Report on the enquiry to bring Technical Institutions into closer touch and more practical relations with the Employers of Labour in India. By Lieutenant-Colonel E. H. DeV. Atkinson, R.E., and T. S. Dawson, As. 10.
- Papers regarding the Educational Conference, Allahabad, February 1911. Re. 1-8.
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